

PRODUCT DATA SHEET

USP XXIV

L-HISTIDINE

CAS No. [71-00-1]

$C_6H_9N_3O_2$

M.W.: 155.15

>> Histidine contains not less than 98.5 percent and not more than 101.5 percent of $C_6H_9N_3O_2$, as L-Histidine, calculated on the dried basis.

Appearance: White crystals or crystalline powder: slightly acid and bitter taste. Freely soluble in water and in acid practically insoluble in ethanol and in ether.
Dissolves in dilute hydrochloric acid.

SPECIFICATIONS

Identification	:	Infrared absorption (197K) - the test specimen and Reference Standard are previously recrystallized from 80% alcohol.
Specific rotation	:	+12.6° - +14.0° Test solution: 110mg per mL, in 6N hydrochloric acid
pH	:	7.0 to 8.5, in a solution (1 in 50)
Loss on drying	:	Dry it at 105° for 3 hours: it loses not more than 0.2% of its weight
Residue on ignition	:	Not more than 0.4%
Chloride	:	A 0.73-g portion shows no more chloride than corresponds to 0.50 mL of 0.020 N hydrochloric acid (0.05%)
Sulfate	:	A 0.33-g portion shows no more sulfate than corresponds to 0.10 mL of 0.020 N sulfuric acid (0.03%)
Arsenic	:	1.5 ppm
Iron	:	0.003%
Heavy metals, Method I	:	0.0015%
Assay	:	Transfer about 150mg of Histidine, accurately weighed, to a 125 mL flask, dissolve in a mixture of 3 mL of formic acid and 50 mL of glacial acetic acid, and titrate with 0.1 N perchloric acid VS, determining the endpoint potentiometrically. Perform a blank Determination, and make any necessary correction. Each mL of 0.1 N perchloric acid is equivalent to 15.52 mg of $C_6H_9N_3O_2$

